

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double brackets indicating deletions.

Listing of the Claims

1. (Withdrawn) A polymer with dispersed fine metal particles in which fine metal particles are dispersed in an organic polymer, wherein:

said polymer with dispersed fine metal particles is obtained by intercalation of a metal ion between layers of a lamellar crystalline organic polymer having an acidic group, and subsequent reduction.

2. (Withdrawn) A polymer with dispersed fine metal particles according to claim 1, wherein said lamellar crystalline organic polymer is a polymer of a diene having a carboxyl group.

3. (Withdrawn) A polymer with dispersed fine metal particles according to claim 1, wherein said lamellar crystalline organic polymer comprises an ammonium carboxylate group.

4. (Withdrawn) A polymer with dispersed fine metal particles according to claim 1, wherein the fine metal particles are at least one type of particles selected from transition metals.

5. (Withdrawn) A polymer with dispersed fine metal particles according to claim 1, wherein the fine metal particles are at least one type of particles selected from the group consisting of silver, gold and platinum group elements.

6. (Currently Amended) A method for producing a polymer with dispersed fine metal particles in which metal fine particles are dispersed in an organic polymer, comprising:

preparing a metal ion-containing polymer having a structure in which the metal ion is intercalated between layers of a lamellar crystalline organic polymer, by mixing the lamellar crystalline organic polymer including a topochemical polymer of muconic acid or a topochemical polymer of muconic acid benzylammonium with a substance containing the metal ion, ~~said lamellar crystalline organic polymer (i) being a polymer of a diene having a carboxyl group or (ii) comprising an ammonium carboxylate group,~~ said substance containing the metal ion being a metal hydroxide, said mixing being conducted by impregnating or dispersing said lamellar crystalline organic polymer for 20 to 60 minutes in a methanol solution containing said hydroxide in an amount of not less than 1 mol/L; and

reducing the metal ion in said metal ion-containing polymer so as to obtain the ~~fine~~fine metal particles.

7. (Original) A method for producing a polymer with dispersed fine metal particles according to claim 6, wherein the metal ion is reduced by photoreduction, in case said metal ion is silver or gold ion.

8. (Original) A method for producing a polymer with dispersed fine metal particles according to claim 6, wherein said metal ion is reduced by a reducing agent, in case said metal ion is cation of platinum group element.

9. (Cancelled).

10. (Withdrawn) A metal ion-containing polymer having a structure in which metal ion is intercalated between the layers of a lamellar crystalline organic polymer having an acidic group.

11. (Withdrawn) A metal ion-containing polymer according to claim 10, wherein the crystalline organic polymer is a polymer of a diene having a carboxylic group.

12. (Withdrawn) A metal ion-containing polymer according to claim 10, wherein the metal ion is at least one kind of metal ions selected from the group consisting of alkali metals, silver, gold and platinum group element.

13-15. (Cancelled).

16. (Previously Presented) A method for producing a polymer with dispersed fine metal particles according to claim 6, the method comprising:

in case where said metal ion is other than alkali metal ions,

preparing an alkali metal ion-containing polymer in which alkali metal ion is intercalated between the layers of the lamellar crystalline organic polymer by mixing said lamellar crystalline organic polymer with the substance containing an alkali metal ion, and

ion-exchanging the alkali metal ion in the polymer with a metal ion other than the alkali metal ion.

17. (Previously Presented) A method for producing a polymer with dispersed fine metal particles according to claim 16, wherein the ion-exchanging is conducted by impregnating said polymer containing the alkali metal ion in a solution of a substance containing the metal ion other than the alkali metal ion.

18. (Withdrawn) A polymer with dispersed fine metal particles according to claim 2, wherein said lamellar crystalline organic polymer comprises an ammonium carboxylate group.

19. (Withdrawn) A metal ion-containing polymer according to claim 11, wherein the metal ion is at least one kind of metal ions selected from the group consisting of alkali metals, silver, gold and platinum group element.

20. (Cancelled).

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END OF CLAIM LISTING